

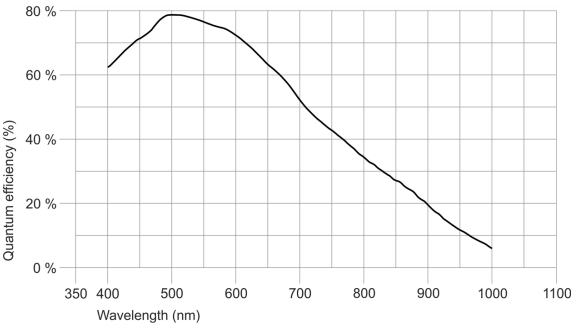
**In series**  
The model is in series and available for the long term.



Specification

Sensor

|                                         |                      |
|-----------------------------------------|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Rolling shutter      |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 2 MP                 |
| Resolution                              | 2.12 Mpix            |
| Resolution (h x v)                      | 1936 x 1096 Pixel    |
| Aspect ratio                            | 16:9                 |
| ADC                                     | 12 bit               |
| Color depth (camera)                    | 12 bit               |
| Optical sensor class                    | 1/3"                 |
| Optical Size                            | 5.614 mm x 3.178 mm  |
| Optical sensor diagonal                 | 6.45 mm (1/2.48")    |
| Pixel size                              | 2.9 µm               |
| Manufacturer                            | Sony                 |
| Sensor Model                            | IMX290LLR-C          |
| Gain (master/RGB)                       | 20x/5x               |
| AOI horizontal                          | same frame rate      |
| AOI vertical                            | increased frame rate |
| AOI image width / step width            | 256 / 8              |
| AOI image height / step width           | 1 / 1                |
| AOI position grid (horizontal/vertical) | 8 / 1                |
| Binning horizontal                      | -                    |
| Binning vertical                        | -                    |
| Binning method                          | -                    |
| Binning factor                          | -                    |
| Subsampling horizontal                  | same frame rate      |
| Subsampling vertical                    | same frame rate      |
| Subsampling method                      | M/C automatic        |
| Subsampling factor                      | 2, 4, 8              |



## Model

|                                   |                    |
|-----------------------------------|--------------------|
| Frame rate freerun mode           | 135                |
| Frame rate trigger (continuous)   | 67                 |
| Frame rate trigger (maximum)      | 67                 |
| Exposure time (minimum - maximum) | 0.011 ms - 1649 ms |
| Long exposure (maximum)           | 114000 ms          |
| Power consumption                 | 1 W - 1.5 W        |

## Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.  
For PCB versions, refer to the separate hints in the respective documentation.

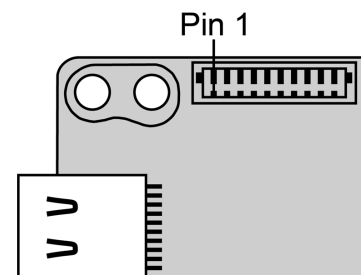
|                                     |                                 |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Device temperature during storage   | -20 °C - 80 °C / -4 °F - 176 °F |
| Humidity (relative, non-condensing) | 20 % - 80 %                     |

## Connectors

|                     |                                          |
|---------------------|------------------------------------------|
| Interface connector | USB Type-C                               |
| I/O connector       | 10-pin Wuerth connector (WR-WTB 1.00 mm) |
| Power supply        | USB cable                                |

## Pin assignment I/O connector

|    |                                                  |
|----|--------------------------------------------------|
| 1  | Voltage output 5 V, max. 400 mA                  |
| 2  | Ground (GND)                                     |
| 3  | General Purpose I/O (GPIO) 2, 3.3 V - Line 3     |
| 4  | General Purpose I/O (GPIO) 1, 3.3 V - Line 2     |
| 5  | Do not connect (for future use)                  |
| 6  | Do not connect (for future use)                  |
| 7  | Trigger input without optocoupler 3.3 V - Line 0 |
| 8  | Flash output without optocoupler 3.3 V - Line 1  |
| 9  | Ground (GND)                                     |
| 10 | Voltage output 3.3 V                             |



Camera rear view

## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | CS- / C-Mount               |
| IP code          | -                           |
| Dimensions H/W/L | 36.0 mm x 36.0 mm x 20.0 mm |
| Mass             | 18 g                        |